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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 10/633,063 | 08/01/2003 | J. Joseph Allred | 134358XZ (15022US01) | 3586 |
| 23446 | 7590 | 03/27/2006 | EXAMINER | |
| MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661 | | | BROWN, MICHAEL J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2116 | |

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------|---------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/633,063 | ALLRED ET AL. | |
| | Examiner | Art Unit | |
| | Michael J. Brown | 2116 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 15 is objected to because of the following informalities: on the last line of claim 15 the claim reads "based on upon system configuration", should read "based upon system configuration" omitting "on". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Gordon et al.(US Patent 5,808,376).

As to claim 1, Gordon et al. discloses an adaptable power management system(power management and distribution system, see column 5, line 13), the system comprising a measurement unit(input current sensing module 204, see Fig. 3) for measuring current in an imaging system(CT scanner system, see column 5, line16), and a main system power(uninterruptible power supply(UPS) 40, see Fig. 2A) for providing power to the imaging system for core system functions. Gordon et al. also discloses a battery charger(charger 120, see Fig. 2B) for recharging a battery(battery 16, see Fig. 2B) used for imaging, and a power controller(input voltage and current sense and

control 202, see Fig. 3) for allocating power among the main system power and the battery charger based on a current measurement from the measurement unit.

As to claim 2, Gordon et al. discloses the system wherein the measurement unit measures at least one of current and voltage at a plurality of points in the imaging system(see column 11, lines 55-61).

As to claim 3, Gordon et al. discloses the system wherein the power controller controls battery charging current after main system power has been allocated(see column 14, lines 45-55).

As to claim 4, Gordon et al. discloses the system further comprising at least one component providing additional function in the imaging system(see column 5, lines 16-18).

As to claim 5, Gordon et al. discloses the system wherein the power controller allocates power among the at least one component(see column 5, lines 16-18).

As to claim 6, Gordon et al. discloses the system wherein the power controller dynamically allocates power within a power limit(see column 14, lines 30-36).

As to claim 7, Gordon et al. discloses a method for dynamic power management(power management and distribution system, see column 5, line 13) in an imaging system(CT scanner system, see column 5, line16), the method comprising measuring current input in an imaging system(see column 11, lines 24-25), and allocating power in the imaging system based on a system configuration and the current input in the imaging system(see column 11, lines 4-10 and lines 30-45).

As to claim 8, Gordon et al. discloses the method wherein the measuring step further comprises measuring at least one of voltage and current at a plurality of locations in the imaging system(see column 11, lines 55-61).

As to claim 9, Gordon et al. discloses the method wherein the allocating step further comprises dynamically allocating power based on system usage(see column 14, line 56- column 15, line 10).

As to claim 10, Gordon et al. discloses the method further comprising re-allocating power in the imaging system based on a change in configuration(see column 8, lines 9-12).

As to claim 11, Gordon et al. discloses the method further comprising re-allocating power in the imaging system based on current consumption exceeding a predefined limit(see column 11, lines 49-53).

As to claim 12, Gordon et al. discloses the method further comprising allocating available current to a battery charger(see column 14, line 63- column 15, line 5).

As to claim 13, Gordon et al. discloses the method further comprising maintaining at least a minimum level of power for basic imaging system functions(see column 11, line 66- column 12, line 2).

As to claim 14, Gordon et al. discloses the method further comprising controlling an amount of current drawn by components in the imaging system(see column 11, lines 49-55).

As to claim 15, Gordon discloses a power management system(power management and distribution system, see column 5, line 13) for an imaging system(CT

scanner system, see column 5, line 16) comprising a power input (uninterruptible power supply (UPS) 40, see Fig. 2A) providing power to an imaging system, at least one measurement unit (input current sensing module 204, see Fig. 3) for measuring current in the imaging system, and a power management controller (input voltage and current sense and control 202, see Fig. 3) allocating available power among components in the imaging system based upon system configuration.

As to claim 16, Gordon et al. discloses the system wherein the power management controller allows a battery for the imaging system to charge at a maximum rate based on current consumption by the components in the imaging system (see column 14, lines 45-55).

As to claim 17, Gordon et al. discloses the system wherein the at least one measurement unit measures a voltage and a current for the power provided to the imaging system (see column 11, lines 56-61).

As to claim 18, Gordon et al. discloses the system wherein the power management controller controls current drawn by the components in the imaging system (see column 11, lines 30-32).

As to claim 19, Gordon et al. discloses the system further comprising a limit sensor (protection circuit 206, see Fig. 3) for detecting when current consumption exceeds a certain limit (see column 11, lines 37-41).

As to claim 20, Gordon discloses the system further comprising at least one switching unit controlled by the power management controller, wherein the at least one

switching unit controls an amount of power routed to at least one component in the imaging system(see column 11, lines 45-55).

Response to Arguments

3. Applicant's arguments filed 1/11/2006 have been fully considered but they are not persuasive. Applicant argues that Gordon does not disclose a power controller that allocates power between the main system power and the battery charger based on this current measurement from the measurement unit. Examiner disagrees as Gordon discloses an input voltage and current sense and control(IVCSC) and DC/DC converter module(202) in which allocates power based on current measurement from the input current sensing module(204)(see column 11, lines 8-10 and 45-55).

Applicant also argues that Gordon does not teach a power controller that dynamically allocates power within a power limit, and Gordon does not disclose that the power allocated to system components changes with respect to a given power limit. Examiner disagrees as Gordon discloses the IVCSC module(202) in which allocates power with respect to a minimum and maximum acceptable threshold voltage(see column 11, lines 58-61).

Applicant also argues that Gordon does not teach "allocating power in the imaging system based on a system configuration and the current input in the imaging system". Examiner disagrees as Gordon discloses allocating power in the CT scanner system based on current measurement from the input current sensing module(204)(see column 11, lines 8-10, 30-45, and 45-55).

Finally applicant argues that Gordon does not disclose a method for re-allocating power in the imaging system based on current consumption exceeding a predefined limit. Examiner disagrees as Gordon discloses allocating power in the CT scanner system based on current consumption exceeding an allowed current threshold(see column 12, lines 15-18).

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brown whose telephone number is (571)272-5932. The examiner can normally be reached on Monday-Friday from 7:00am to 3:30pm(EST).

Art Unit: 2116

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIRS) system. Status information for the published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications are available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Michael J. Brown
Art Unit 2116


LYNNE H. BROWNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100